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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,085	05/12/2006	James A. Horton	5557-2US	6347
27915 7590 09/19/2007 ROBERT S. LIPTON, ESQUIRE 201 NORTH JACKSON STREET P. O. BOX 934 MEDIA, PA 19063-0934			EXAMINER KIM, KENNETH S	
			ART UNIT 2111	PAPER NUMBER
			MAIL DATE 09/19/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/579,085

Applicant(s)

HORTON ET AL.

Examiner

Kenneth S. KIM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

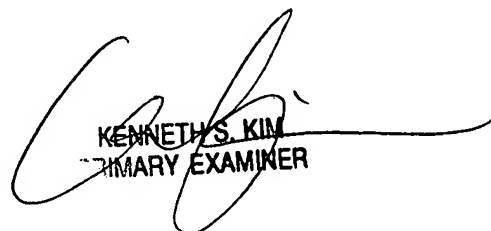
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


KENNETH S. KIM
PRIMARY EXAMINER

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

1. Claims 1-20 are presented for examination.
2. Applicant is requested to file new formal drawings that contain numeral indicators for various elements and texts with legible font size.
3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - (a) Claim 1, it is not clear what is meant by "each element *accessing* a set of *available* processing element".
 - (b) Claim 1, it is not clear what is the use of the destination of a message indicated by the addressing means.
 - (c) Claim 1, it is not clear what is meant by "which message port is to be given access to the processing associated processing element or message port" and what is the significance of being given access.
 - (d) Claim 1, it is not clear how a route is established.
 - (e) Claim 20, the same as (a) to (d), and "providing" and "associating" are abstract terms and do not describe a physical function.

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5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al, U.S. Patent No. 7,080,156.

Lee et al teaches the invention as claimed in claim 1 including a message passing fabric modular processing system comprising:

(a) a plurality of processing elements, each element accessing a set of available processing elements (201),

(b) a plurality of message ports in communication with each processing element, each pair of message ports on adjacent processing elements defining a message path there between (104),

(c) addressing means associated with each processing element for indicating the destination of a message in the fabric (403; col. 7, line 3),

(d) prioritization means associated with each processing element and each message port for determining which message port is to be given access to the associated processing element (404; col. 7, line 5) or message port (405; col. 7, line

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10),

(e) wherein the fabric asynchronously establishes routes for synchronous messages from an origin processing element to a destination processing element to permit an operation to occur at the destination processing element (col. 5, lines 21-25), and

further teaches as in claims 2-19,

(f) the fabric is comprised of heterogeneous processing elements (col. 4, line 51; col. 5, lines 2-5) – claims 2-9,

(g) optimal path under various conditions (deadlock contention) determined based on information stored in modifiable data structure (col. 1, lines 59 and 62; col. 7, line 39; table 1) – claims 10-18.

The method claim 20 is equivalently rejected based on the same reason.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mukherjee et al taught a method of prioritizing input port.

Edelman taught a method of routing messages among processing nodes.

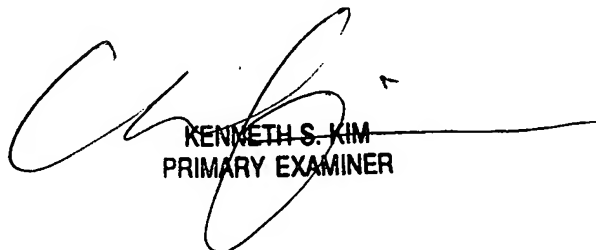
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth S KIM whose telephone number is (571) 272-3627. The examiner can normally be reached on M-F (8:30-17:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (571) 272-3632. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for all communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

September 14, 2007



KENNETH S. KIM
PRIMARY EXAMINER